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ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF RURAL PEOPLE ABOUT ORAL AND DENTAL HEALTH

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ABSTRACT

Oral and dental health is concerned with a person's teeth, gums and mouth. The goal is to prevent complications such as tooth decay (cavities) and gum disease, and to maintain the overall health of mouth. The main objective of this study was to assess knowledge, practice, thoughts and activity of rural people regarding oral and dental health, oral hygiene consciousness, and dentist assistance. This research work was a cross sectional type of descriptive study. Total 200 respondents participated from Bagura Sadar upazilla of Bagura district. A structured questionnaire was used for a face to face interview and the collected data ware analyzed by using SPSS 27.0.1.03.7. It was found that, 52.5% rural people are going to pharmacy when they feel any problem in their orofacial region, 59% of people do not know about dentist, 70% people do not have any idea of dentist degree BDS. But 61% are conscious about oral hygiene. 47% people use toothpaste and toothbrush to clean their teeth. 57 % are cleaning their teeth one time in a day. Majority of rural people have wrong idea towards attitude, activity, practice, and knowledge regarding oral and dental health. Therefore, it is urgent to promote oral and dental health education in the country.

Keywords: Oral health, dental health, pharmacy, orofacial region, dentist

Introduction

Oral cavity is a delicate part of our body. It is also a part of human health service, as like as other parts of human body. Oral biology is enriched by normal flora. Some special structures like teeth, gingiva, tongue etc. a lot of treatment procedure is available viz. tooth extraction, root canal treatment (RCT), pulpotomy, pulpectomy, surgical extraction, onchological treatment in oral cavity, tumor operation , cavity filling , scaling and polishing , flap surgery etc (Singh *et al.* 2014). Our mouth is filled with up to six million bacteria, most of them are harmless (Khatib *et al*. 2018). Over time, if a person neglects to brush their teeth and floss, the bacteria will continue to grow, contributing to diseases including Diabetes, HIV/ AIDS, Osteoporosis, Cancer, Heart disease etc.

Globally it is estimated that, 2.3 billion people suffer from caries of permanent teeth and more than 530 million children suffer from caries. The most prevalent and consequential oral diseases are dental caries/ tooth decay, periodontal diseases, tooth loss, cancers of lips and oral cavity (Bhuiyan *et al*. 2020). So it is necessary to maintain good oral health by brush twice a day with fluoride containing toothpaste, floss daily to remove plaque, eat a healthy diet to gain nutrients and avoid tobacco.

Like most non-communicable diseases, oral conditions are chronic and strongly social patterned. Children living in poverty, social marginalized group, and older people are most affected by oral diseases, and have poor access to dental care (Mehta and Kaur 2012). The costs of treating oral diseases impose large economic burdens to families and health care systems.

Access to oral health services is necessary. Unequal distribution of oral health professionals and a lack of appropriate facilities in most countries means that access to primary oral health services is often low (Winner *et al*. 2015, Sibghatullah *et al*. 2018). Bangladesh lags behind in the ratio between patients and their doctors, and nurses when compare to other neighboring countries, thereby hindering proper and timely health care. Our country has only six doctors, nurses, and midwives for every

10,000 population according to latest report of health bulletin published yearly by the health ministry. This crisis in health service of Bangladesh is more prone in the specialized field of dentistry.

Prevention is better than cure. For a successful prevention, knowledge of education, dynamics of transmission, identification of risk factors, availability of prophylactic or early detection, treatment measures, organization for applying these measures, continuous evaluation of procedures applied are necessary. This is a study on relation among socio demographic condition, relation and consciousness of people about their dental health. This study will also help in improving the quality of life style by changing people's habit. Therefore, the purpose of this study is making learnings on knowledge, attitude and practice of oral and dental health among the population of the study area.

Methodology

Research design: Research work was done by a cross sectional study design by face to face interviews of 200 respondents.

Research area and period: The study was conducted on Sadar Upazilla of Bogura district at Thengamara, Gokul, Mahishbathan, Nowdapara and Baghopara from January, 2022 to June, 2022

Sampling method: Data were collected from desired respondents after getting their voluntary consents by random sampling techniques.

Data collection: The interviewer's and supervisors were trained on the technique of collection of information and the details of the questionnaire from the unmarried adolescent girls. A total of 200 in-depth interviews were collected.

Data management and analysis plan: All interview questionnaires were checked for their internal consistency, to exclude missing or inconsistent data. Data was entered into the data file using statistical software called W Stata. The analytical plan of the study includes description of the study population by their socio- demographic characteristics first. For this, some descriptive statistics was used like mean, median, mode and percentages in order to find out the association between the dependent and independent variables, chi-square tests was performed to find out the bivariate relationship and their level of significance. For better view of the study population some graph and charts were used. To adjust confounding effect multiple linear regression was done.

Results and Discussion

The mean age was 27.2 years (Figure 1). It was observed that the highest concentration of the population was in age group 21-30 years which was 32.5% and second highest age group 31-40 years which was 27.5%. It is interesting to note that the population composition is lower in the age group 81-90 years.

The gender of the surveyed population shows that among 200 respondents, 136 were found Male which is 68% while Female was 64 which is 32% (Figure 2).

It is found that, in the study area, 20.5% are farmer, 24% are house hold worker, 18 % are job holder, 9.5 % are day laborer, 14.5 % are trader/self-employee, and 13.5% are belonging to others (Figure 3). Occupational pattern is now changing. In 2021, 37.09 percent of the employees in Bangladesh were active in the agricultural sector, 21.71 percent in industry and 41.2 percent in the service sector (BBS 2022).

Among the respondents of the study areas, 73.5 % are married, 23.5% are unmarried, 1.5 % are widowed and 1.5 % are divorcee (Table 1). There are several types of marital status: single, married, widowed, divorced, separated and, in certain cases, registered partnership. It is evident from the table (Table 1), 4.5 % are illiterate, 11.5 % have signature knowledge, 7.5 % have knowledge of letters, 13% are class five to nine pass, 14 % are SSC pass, 18.5 % are HSC pass, 22% graduate and 9 % are higher educated respondents. Considering the national level, it is found that, the functional literacy rate among people aged between 11-45 years, 73.69% in 2023 which was 53.70% in 2011. Such functional literacy rate among the population aged between 7-14 years is now 72.97%, however, 60.77% among population aged 15 years and above (BBS 2023).

It is apparent from table 2 that, when respondents feel

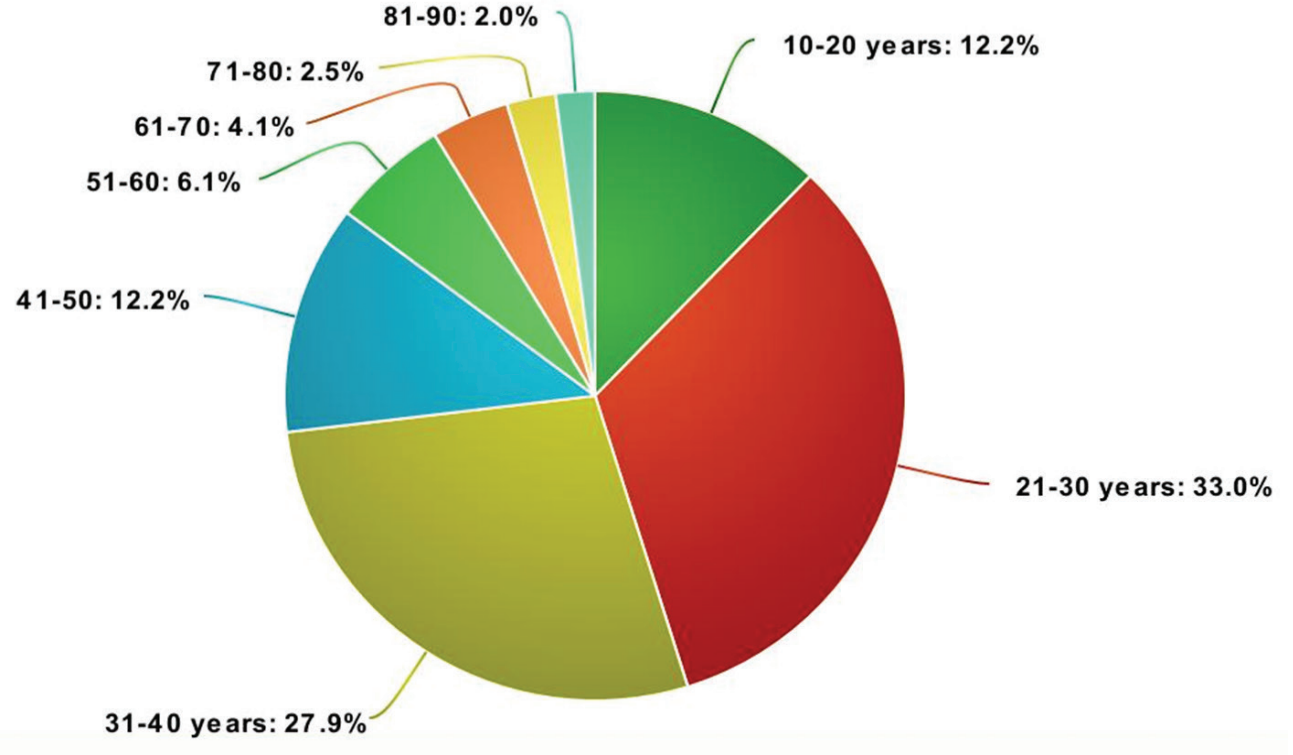

Figure 1. Distribution of surveys population by age group (n-200).

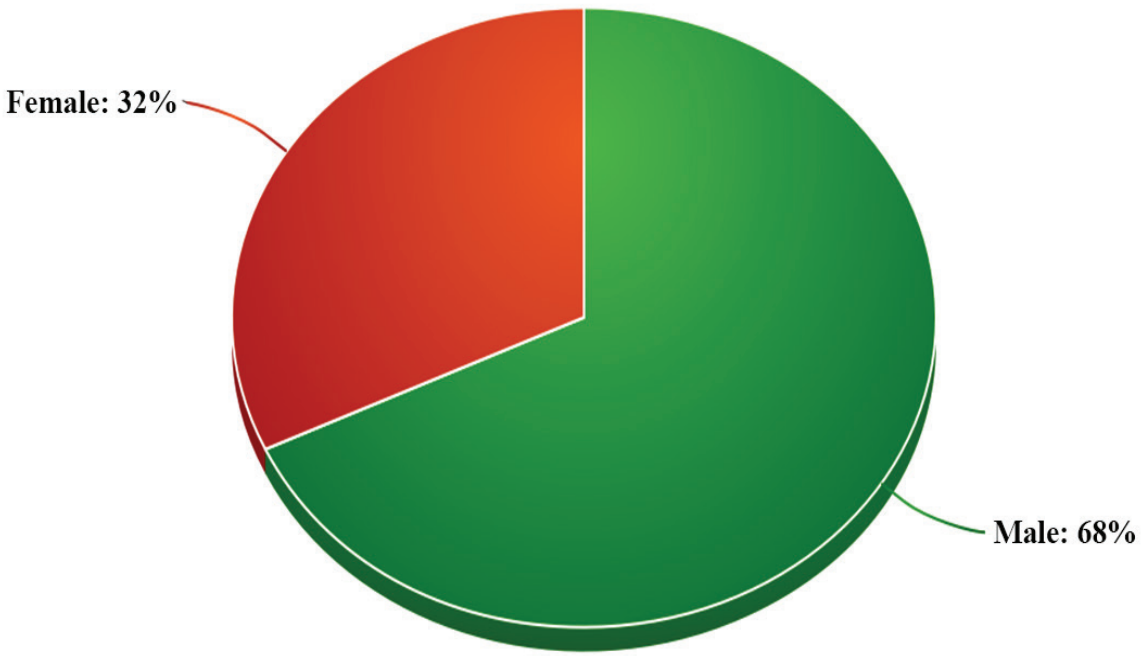

Figure 2. Distribution of gender of the surveyed population.

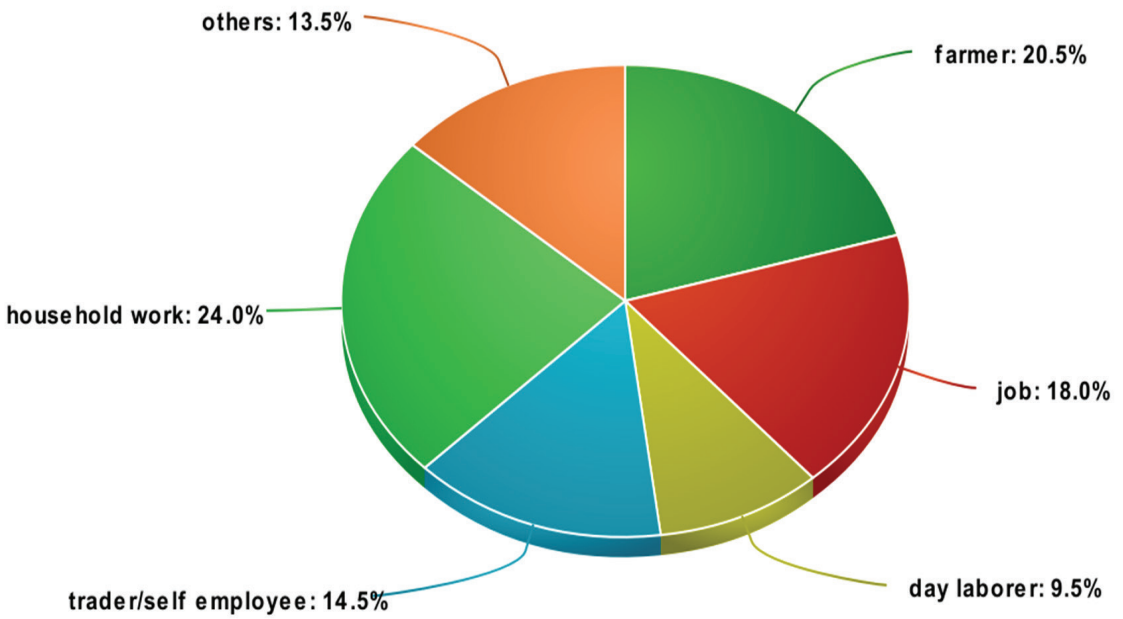

Figure 3. Distribution of population by occupational status.

problem in their orofacial region, the highest 52.5% were used to go in a pharmacy, 35.5% dentist chamber while 1.0% consult with homeopathy physician (Table 2). In this regard, Khatib *et al*. (2018) and Amith *et al*. (2013) found that orofacial pain is the big burden over the society which leads to high morbidity and psychological stress.

It is observed from the table above that, 30% participants can tell BDS as dentist's qualification while 70% donot know (Table 3). Wohab Khan *et al*. (2012) opined that any academic field the question of quality is central issue. It is obvious from the table above that, 30.5 % people are conscious on oral hygiene. 69.5% are not conscious on oral hygiene. It reveled from the table no. 3 that 30.5% people are conscious on oral hygiene but 69.5% are not conscious. Results are supported by Bhuiyan *et al*. (2020).

Also, 47% respondents clean their tooth by using tooth paste and tooth brush, 45% use meshwak while 8% use tooth powder. Present results are comparable with Winnier *et al*. (2015).

It is pragmatic from Table 4 that 57% respondents clean their teeth one time in a day, 41.5 % clean their teeth two times while 1.5 % clean their teeth three times in a day. Karim (2017) conducted a research on dental care in Dhaka division primary school children in 2017 and found that 78.07% respondents clean teeth regularly. The highest 57.5% respondents usually clean their teeth before meal, while 37% clean their teeth before and after meal. Bhuiyan *et al.* (2020) found that, 81% of the children interviewed used a toothbrush and tooth paste to clean their teeth in Pirojpur district.

Table 1. Marital status and education of the population

Marital Status	Percent	Education level	Percent	Education level	Percent
Married	73.5	Illiterate	4.5	SSC	14.0
Unmarried	23.5	Signature knowledge	11.5	HSC	18.5
Widowed	1.5	Knowledge of letters	7.5	Graduate	22.0
Divorcee	1.5	Class five to nine pass	13.0	Higher Education	9.5

Table 2. Orofacial problems of population

Option	Observation	Percent	Option	Observation	Percent
Going to dentist	71	35.5	Medicine doct.	4	2
Going to pharmacy	105	52.5	Homeo doct.	2	1
Self treatment	11	5.5	Others	7	3.5

Table 3. Knowledge about dentists qualification, hygiene awareness and oral hygiene maintenance

Dentist qualification		Hygiene awareness		Hygiene maintenance			
Knowledge	Percent	Hygiene	Percent	Observation	Percent	Observation	Percent
Yes	30	Yes	30.5	Brush	47	Powder	8
No	70	No	69.5	Meshwak	45	Others	-

Table 4. Teeth cleaning frequency per day and cleaning time

Teeth cleaning frequency per day			Teeth cleaning		
Time	Observation	Percent	Cleaning time	Observation	Percent
One time	114	57	Before meal	57.5	115
Twice	83	41.5	After meal	5.5	11
Thrice	3	1.5	Both	37	74

About 32% respondents have knowledge about mouth wash and 68% do not have acquaintance about mouth washing. Amal Senusi *et al*. (2020) found that mouth wash during the first three months significantly reduced the oral ulcer severity, other becket diseases, and intraoral scarring, and also improved oral health quality of life. Results are also comparable with Gharoudi and Khorsand (2016).

Conclusion

This research purpose was to asses people's attitude, thoughts and activity about oral and dental health. Implement oral health education and promotion program among the rural areas is very necessary in Bangladesh. As like as oral health campaign, dental camp, seminar etc need to organize to motivate people about is oral and dental health.

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